

PLYMPTON ST. MARY
RURAL DISTRICT COUNCIL.

ANNUAL REPORT

FOR 1903,

OF THE

Medical Officer of Health,

S. NOY SCOTT,

D.P.H., London, L.R.C.P., Lond., M.R.C.S., Eng.


Plymouth—

UNDERHILL & CO., PRINTERS AND STATIONERS, 14 FRANKFORT STREET.

1904.

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TO THE
PLYMPTON St. MARY
Rural District Council.

ANNUAL REPORT

OF THE MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1903.

GENTLEMEN,

Herewith I have the honour of submitting to you my Annual Report of the Public Health of the Plympton St. Mary Rural District for the year 1903.

As the report is not only for your own information, but also for that of the County Council and the Local Government Board, it will necessarily contain various statements which are mere repetitions of former reports, or which may appear superfluous to you, but yet are of importance to those who have to derive their knowledge of local circumstances and questions directly from this report. It will, therefore, be arranged on the basis suggested by the Local Government Board, and will therefore include:—

- (1) A brief description of the physical features and characters of the District;

- (2) The vital statistics of the year and comparisons between this and preceding years ;
- (3) Notes on the diseases prevalent during the year, and the means adopted for dealing with infectious diseases especially ;
- (4) A description in detail of the sanitary conditions of the particular parishes and villages, with notes on the work done during the year, and on what is wanted in the future. This section should be read and compared with the report of your Sanitary Inspector, Mr. W. E. Horton.
- (5) Notes on the powers possessed and exercised by you over Buildings, Slaughter-houses ; Dairies, Cow-sheds and Milkshops, ; Bakehouses, Factories, and Workshops ; and offensive trades, &c.

In the table of statistics prepared for the year, it will be noticed that I have estimated the population to have increased from that of last year. In the face of the fact that it had decreased considerably between 1891 and 1901, I feel it is necessary to give the reasons which have induced me to conclude that a slight increase has appeared since 1902. First the births registered in every parish were, with the two exceptions of Ermington and Bickleigh, in excess of the deaths, and in the North District the apparent gain from that was 102, and in the South 101. Together these represent a total gain of 206. In addition to this there were in the North District 8 houses built and occupied during the year, and in the South District 21 such houses, and from my general knowledge of the district I know that many of these are occupied by people who have hitherto lived outside the district. This is especially true of Plymstock parish, where 19 new houses have been built, and which represent—on the basis of 4 people per house—a gain of 76 people. The total gain throughout the whole district from births and immigration I estimate to be

322 ; but on the other hand as there was, no doubt, a loss from emigration to the towns, I have concluded that the net gain might safely and reasonably be represented as 290, of which I have assigned 130 to the North District and 160 to the South. The greatest relative increase is, therefore, in the South District, and especially in the parish of Plymstock, a condition no doubt as largely due to the well-distributed water supply which that parish now possesses as to its close proximity to Plymouth.

The value of vital statistics depends so largely on the accuracy with which the population can be estimated that I have taken considerable trouble to be fair in my estimate.

The Census, however, being taken only once in 10 years, it is almost impossible to avoid errors, and I cannot therefore omit this opportunity of again stating my opinion that a quinquennial census ought to be established.

Factory and Workshops Acts, and Dairies, Milkshops, and Cowsheds Acts, 1901.

During the year good work has been accomplished under these Acts, the particulars of which are referred to in later paragraphs.

I am, Gentlemen,

Your obedient Servant,

S. NOY SCOTT,

Medical Officer of Health.

ANNUAL REPORT

OF THE MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1903.

THE area of the Plympton St. Mary Rural District for Sanitary purposes is 71,558 acres.

The district is situated at the extreme west of the South Hams and is bounded on the North by Dartmoor and the River Tavy; on the South by the English Channel, and the Towns of Plymouth and Devonport; on the West by Plymouth Sound, Plymouth, Devonport, and the River Tamar; on the East by the hilly district of the South Hams.

From the hills lying on the East and North there are a series of undulations, running mostly towards the sea on the South and West, and along the valleys thus formed are the Rivers Erme, Yealm, and Plym, with their tributaries.

In the North part, the land is chiefly moor-land, and contains valuable china clay works. The remainder of the district is mainly agricultural, and in most places, in a good state of cultivation. The surface is well wooded.

The GEOLOGY of the district varies much in the different localities. In the North there are large deposits of granite, which in places is disintegrated and forms the china clay beds; whilst in the south-west are very extensive and thick beds of limestone. Slate is found in large quantities on the banks of the Plym, in the parishes of Egg Buckland and Plympton St. Mary, whilst scattered throughout the district are shillet and dunstone.

The CLIMATE is mild and humid, and the rainfall abundant, but no official meteorological records are kept, I am, however, able to include statements as to the rain-fall of last year at Langham Hill, Ivybridge, and at Thorncott Hoœ, for which I am respectively indebted to Miss Glanville and J. Little, Esq. *Vide page 51.*

The WATER SUPPLY. The district contains abundant and satisfactory water in the shape of streams and springs, but these are very unequally distributed, and therefore some of the villages—especially in the southern part of the district—are so far from them as to be almost entirely dependent upon shallow well and stored rain-water.

The water is derived from the following sources :—

- (1) Upland surface water from Dartmoor and similar places which, collecting in small streams, yields a plentiful supply of good and pure water.
- (2) Springs and deep wells: These are found in various localities, and yield a water whose quality depends entirely upon the particular soil in which the well is. In the limestone district, the water is sometimes very hard from dissolved carbonate and sulphate of lime, and except for the hardness, the water is good, and generally speaking, very pure, *i.e.*, free from organic pollution.
- (3) Shallow wells: These are scattered throughout the district, and very largely consist of mere surface water. These wells afford a water which may be good or very bad, according to their depth, position (proximity to cess-pit, etc.), and liability to surface pollution. A Sanitary Authority should never be content with a water supply, which is derived from shallow wells.

During the past few years the water supply of the district has been steadily improved, and the Council is persistently endeavouring to satisfactorily fulfil its statutory duties as a provider of pure public supplies of water, and as evidence of this I merely note the fact that during my tenure of office good and efficient public water supplies have been established in Plymstock, Dunstone, Yealmpton, Cornwood, Luton, Egg Buckland and Sparkwell. And I am glad to state that at last there seems a reasonable probability at no distant date of getting a satisfactory supply of water for Newton Ferrers. Only those who are familiar with the work of the District Council can realise the time which has been spent, and the efforts which have been made in endeavouring to solve this important question, to these I again refer in my remarks under "Newton Ferrers."

SEWAGE AND ITS DISPOSAL:—

Several of the larger villages are drained by a system of sewers by which the sewage is sent into the sea, or water courses, or is carried on to the land and so disposed of by a method of irrigation.

In many of the villages there are several cases in which the sewage from two or more houses is collected in cess-pits. These not only require periodical cleansing and constant attention, but every now and again they produce serious nuisances by suddenly overflowing, especially after heavy rains.

A great number of the cottages and isolated houses are provided with closets over small cess-pits, which "present every feature that should be studiously avoided. Generally sunk below the ground, often open to rainfall, always storing up in close proximity to dwellings decomposing excreta and refuse, they provide almost every condition favourable to the production of nuisance and to the saturation of the ground with filth." But year by year these are gradually being replaced by earth closets, worked on the bucket system, a method of sewage-disposal at once safe and reliable.

The Council is, I am glad to say, fully alive to the necessity of properly and safely dealing with the sewage of the various parts of the district. I refer in detail in my notes on the different parishes to the methods in use, and point out where improvements are needed or are being made. It is, however, an exceedingly difficult matter to deal properly with the sewage of some of the villages, especially of those which lie at or near sea level; and even where the engineering difficulties are surmountable, the acquisition of land for disposal works is almost impossible. In my opinion, District Councils should be given far greater powers for obtaining land for sewage works, and until they have, I fear that common cess-pits, with their accompanying dangers, must remain.

You, as a Council, are peculiarly hampered by the large number of powerful authorities you have to satisfy before you are allowed to carry out any system of sewage disposal, for not only have you to obtain the consent of the Local Government Board and the County Council, but you have also in some instances to submit your proposals to such a conglomeration of authorities as the Board of Trade, the Admiralty, the Duchy of Cornwall, the War Office, the Cattewater Commissioners, the Corporations of Plymouth and Devonport, in addition to the various Parish Councils, and as all these seem to have varying standards of what a sewage scheme should be, it is obvious that prolonged and difficult negotiations have often to be gone through, and I am bound to say that in some cases opposition which can only be described as vexatious has to be met.

It is gratifying to be able to announce that the year 1903 has almost seen the accomplishment of two large and important drainage schemes—one from Crown Hill and St. Budeaux, and the other from Compton and Egg Buckland—both of which have for several years past occupied much of the time and anxiety of the Council.

Vital Statistics.

For Registration purposes, the district is divided into two sub-districts :—

- (a) The North or Plympton containing 11 parishes, and
- (b) The South or Yealmpton containing 8 parishes.

The population of the whole district, which at the 1901 census, was 19,780, is estimated for 1903 to be 20,300, and is distributed in the various parishes as follows :—

North Sub-district :—

NAME OF PARISH.	Area in Acres	Population 1891 census	Population 1901 census	Estimate 1903
Bickleigh	2980	302	296	295
Compton	160	—	274	300
Cornwood	10680	1258	1004	1000
Egg Buckland	3149	1833	1200	1220
Harford	3680	172	137	145
Plympton St. Mary (including Ecclesiastical parish of Sparkwell)	11200	3471	3837	3940
Plympton St. Maurice	170	1139	1117	1120
St. Budeaux	1560	2243	1850	1910
Shaugh Prior	7170	714	785	810
Tamerton Folliott	3910	1118	1102	1120
Weston Peverell	399	811	198	200
Total	45058	*13061	11800	12060

South Sub-district :—

Brixton	3060	622	658	670
Ermington (excluding Urban District of Ivybridge)	4920	900	847	850
Holbeton	4800	949	850	850
Newton Ferrers	3090	710	611	630
Plymstock (including Ecclesiastical Parish of Hooe)	2860	3162	3180	3360
Revelstoke	1460	471	402	410
Wembury	3070	524	501	510
Yealmpton	3240	879	931	960
Total South	26500	8217	7980	8240
Total North	45058	13061	11800	12060
Total Whole District	71558	*21278	19780	20300

* The population of the original rural district as it existed in 1891 before the exclusion of Laira Green, and parts of Egg Buckland, Compton, St. Budeaux, and Weston Peverell by the extension orders of Plymouth and Devonport was 21,759, and the area 74,320 acres.

Inhabited Houses in the District.

The number of houses in the whole district inhabited at the time of the 1891 census was 4333 ; since then 116 were built in 1892, 88 in 1893, 75 in 1894, 143 in 1895, 182 in 1896, 168 in 1897, 142 in 1898, 29 in 1899, 37 in 1900, 37 in 1901, 27 in 1902, and 29 in 1903. After allowing for the number of houses transferred to Plymouth from Egg Buckland, Laira Green and Weston Peverell, and for the 40 added to the district from Compton in 1897, and for those transferred to Devonport by the recent Extension order, I estimate the number of houses in the district to be 4,072 which gives an average of 4·98 persons per house.

In this, however, the Crownhill Barracks with a population of 399, and the Workhouse at Plympton, with a population of 117, are counted as single houses. A truer estimate of the average number of persons per house will be obtained by excluding both these "Institutions," The average is then 4·8 per house.

Births and Birth Rates.

The following births were registered in 1903.

	Males.	Females.	Total.	1902.	1901.
North Sub-district ..	142	142	284	268	293
South Sub-district ..	103	98	201	167	178
Whole District ..	245	240	485	435	471

This gives a Birth rate for the **North** of **23·54** per **1000** as compared with 22·46 in 1902; 24·83 in 1901; 23·28 in 1900; 25·17 in 1899; 27·5 in 1898; 30·31 in 1897; 28·18 in 1896; 29·16 in 1895; 25·65 in 1894; 27·71 in 1893; 25·89 in 1892; and 28·72 in 1891.

For the **South** the rate was **24·39** per **1000** as compared with 20·66 in 1902; 22·3 in 1901; 24·2 in 1900; 22·17 in 1899; 24·83 in 1898; 23·65 in 1897; 24·07 in 1896; 24·38 in 1895; 23·32 in 1894; 27·29 in 1893; 26·83 in 1892; and 25·8 in 1901.

For the **Whole** district the rate was **23·89** per **1000** as compared with 21·73 in 1902; 23·81 in 1901; 23·62 in 1900; 23·91 in 1899; 26·56 in 1898; 27·88 in 1897; 26·73 in 1896; 27·75 in 1895; 24·84 in 1894; 27·55 in 1893; 26·25 in 1892; and 27·5 in 1891.

The average for the last ten years is 25·55.

The birth rate for the whole of Rural England and Wales during 1903 was 27·3.

Marriage Rate.

During the year 137 marriages were registered. This is 19 more than last year.

The marriage rate for this year (or persons married per 1000 of the population) for the district is per 13'4 **1000**, as compared with 11'79 in 1902, 11'83 in 1901, 11'83 in 1900, 11'32 in 1899, 11'37 in 1898, 12'58 in 1897, 15'47 in 1896, 10'96 in 1895, 13 in 1894, 12'01 in 1893, and 12'1 in 1892.

Deaths and Death Rates.

The total deaths registered as taking place within the district in 1903 were as follows :—

	Males	Females	Total	1902	1901
North Sub-district	91	93	184	155	157
South „	48	48	96	80	91
Whole District	139	141	280	235	248

Recorded death rate per 1000, based on above figures :—

	1903.	1902.	1901.	1900.	1899.	1898.	1897.
North Sub-district	15'25	12'99	13'3	16'53	16'41	15'69	14'87
South „	11'65	9'9	11'4	13'59	17'67	16'12	15'93
Whole District	13'79	11'74	12'53	15'31	16'94	15'84	15'25

The average rate for the preceding 10 years is 15'33.

Corrected Death Rates.

Of the deaths registered in the North sub-district, 13 occurred in the following institutions :—

Plympton St. Mary Union Workhouse	..	12
Plympton House Asylum	..	1
		<hr/>
		13
		<hr/>

Of these 13 there were 2 of persons not belonging to the district, so that the actual number of deaths amongst residents in the North District was 182.

In the South sub-district no death of a non-resident was registered, but one death of a resident was registered in Plymouth, so that the number for the South is 97.

After making allowance for the foregoing, the corrected death rates, calculated on the deaths of residents only, are as follows:—

	1903.	1902.	1901.	1900.	1899.	1898.
North sub-district	15·09	12·82	13·3	16·26	16·3	15·9
South „	11·77	9·9	11·4	13·4	17·06	15·4
Whole district	13·74	11·64	12·53	15·10	16·67	15·75

The death-rate for Rural England and Wales in 1903 was 14·8.

The corrected death rates for the respective parishes (excluding public institutions) are as follows:—

	1903.	1902.		1903.	1902.
Harford ..	0·0	0·0	Tamerton Foliot	11·60	9·8
Shaugh Prior	6·17	8·7	Holbeton ..	11·76	14·01
Yealmpton ..	6·25	10·6	Newton Ferrers	12·69	8·07
Brixton ..	8·95	13·6	St. Budeaux ..	14·13	13·7
Revelstoke ...	9·75	9·7	Compton ..	16·66	3·5
Wembury ..	9·80	5·9	Plympton		
Egg Buckland	9·83	10·7	St. Mary ...	17·78	13·57
Cornwood ..	10·00	15·8	Plympton		
Western			St. Maurice ..	18·75	12·7
Peeverell	10·00	15·06	Ermington ..	22·35	5·8
Plymstock ...	11 60	9·9	Bickleigh ..	23·73	19·9

I have given these parochial death rates as in previous years, but much importance cannot be attached to them, the respective populations being too small to afford statistics of any great value.

The deaths belonging to the district were distributed throughout the year as follows :—

North sub. district. South sub. district. Whole district.

	Under 5	Over 5	Total.	Under 5	Over 5	Total.	Under 5	Over 5	Total.
1st quarter	10	33	43	7	20	27	17	53	70
2nd quarter	17	35	52	7	21	28	24	56	80
3rd quarter	13	36	49	5	13	18	18	49	67
4th quarter	10	28	38	8	16	24	18	44	62
Whole year	50	132	182	27	70	97	77	202	279

Classification of Causes of Death :

1903.

	Nth Sub- District.	Sth Sub- District.	Total.	1902.	1901.	1900.	1899.	1898.
Zymotic Diseases ...	21	7	28	15	11	18	30	62
Phthisis ...	10	5	15	10	17	17	17	28
Cancer ...	5	5	10	18	14	21	21	18
Heart ...	20	11	31	25	36	34	31	31
Respiratory System Excluding Phthisis	28	20	48	35	41	62	71	59
Nervous System ...	18	10	28	38	36	29	35	37
Injuries and Suicide	6	5	11	14	7	7	9	13
Old Age ...	36	12	48	32	26	44	41	32
All other causes ...	38	22	60	46	60	63	68	82
Total ...	182	97	279	233	248	295	323	362

Deaths from Zymotic Diseases.

	North Sub- District	South Sub- District	1903 Total	1902	1901	1900	1899	1898
Small Pox	0	0	0	0	0	0	0	0
Measles	13	2	15	2	3	0	5	13
Scarlet Fever	1	0	1	0	0	0	0	1
Whooping Cough	1	4	5	4	0	1	4	17
Diphtheria	1	0	1	6	2	5	1	2
Enteric Fever	1	1	2	0	1	1	1	3
Diarrhœa	3	0	3	3	5	11	17	26
Other Zymotic Diseases	1	0	1	1	0	0	2	0
Totals ..	21	7	28	16	11	18	30	62

The "seven principal" Zymotic Diseases caused 28 deaths, and this gives a Zymotic Death Rate of 1·37 as compared with :—

1902	1901	1900	1899	1898	1897	1896
0·74	0·55	0·93	1·46	2·71	0·99	2·08

The rate for rural England and Wales in 1903 was 1·08.

Deaths from all causes at various age periods.

	1903.			1902	1901	1900	1899	1898
	North sub- d's't'et	South sub- d's't'et	Whole District					
Under 1 year ..	30	21	51	40	40	47	61	101
1 year & under 5 yrs.	20	6	26	11	17	22	23	45
5 „ 15 „	7	3	10	12	9	10	3	18
15 „ 25 „	11	4	15	10	16	15	14	11
25 „ 65 „	41	28	69	59	67	73	83	84
65 „ upwards	73	35	108	101	99	128	139	103
Totals ..	182	97	279	233	248	295	323	362

Of the deaths over 65 there were :—

	1903		1902	1901	1900	1899	1898	1897	1896
46 between 70 and 80	...	44	42	56	54	49	41	47	
34 „ 80 and 90	...	36	31	37	52	29	36	21	
3 of 90 and over	...	0	4	7	3	2	9	0	

Infant Mortality : or deaths of Infants under one year—

This is estimated as a ratio per 1000 births registered during the year; and as these numbered 485, the infant mortality was **105·15 per 1000.**

1903	1902	1901	1900	1899	1898	1897	1896	1895
105·15	91·95	84·92	103·29	133·77	166·39	154·2	115·4	96·3

The Rate for Rural England and Wales for 1903 was 118.

The year has been marked by the following :—

The Birth Rate has risen 2 per 1000 above that for last year, but it is still 1·6 below the average for the past 10 years—as compared with that for Rural England and Wales it is 3·4 less. On looking back over the statistics for the past decade we cannot but be struck with the general reduction which has taken place in the Birth Rate, and whatever reasons have been operative towards this reduction, there seems little ground for hoping that their pernicious influence will cease. The whole tendency of modern life seems to be towards the worship of self, and in consequence there is almost everywhere a growing inclination to avoid, by fair means or foul, the responsibilities and duties of parentage. Men and women alike seem to live their lives with the one object of attaining and enjoying a luxurious and selfish ease, forgetful of the fact that any violent interference with the natural life inevitably brings disastrous punishment alike to the individual and to the nation at large.

The **Death Rate** is a low one, although it is about 2 per 1000 above that of 1902 ; but it must not be forgotten that the rate for 1902 was an abnormally low one, and one which it is almost impossible to maintain outside of Utopia. As compared with the average rate for the preceding ten years it is gratifying to notice that it is 1·33 below the average, and also 1·1 below the rate for Rural England and Wales for 1903.

The **Infant Mortality** shows a considerable rise from last year's figures, yet it is still much below the average for the preceding ten years. Although the increased rate is largely due to the epidemic of measles which appeared in the district, yet carelessness, ignorance, and improper food are still the most important factors in producing a high death rate amongst children.

As compared with the rate for Rural England and Wales that of this district is 2·8 less.

Zymotic Death Rate. During the year the deaths from the 7 principal zymotic diseases were 28. This is almost double that of 1902 ; the large increase being almost entirely due to the epidemic of measles, to which I refer in a later paragraph. Although it is still usual to record the death rate from these seven diseases *en bloc*, yet it is by no means wise to look on such death rate as an adequate test of the sanitary condition of a district, for it is obvious that the real significance of such death rate must "depend on the relative magnitude of its seven constituents," and a large zymotic death rate due to the prevalence of such diseases as measles or whooping cough might and sometimes does appear in a district where the sanitary administration is at a high standard of efficiency, and a high zymotic death rate due to those diseases, is therefore much less significant than a much lower rate produced by small pox, enteric fever or diphtheria. As compared with the last few

years, it is to be noticed that the rate for 1903 is higher than it has been since 1899, and that it is 0·29 above that of rural England and Wales for 1903.

Measles.—This disease caused 15 deaths during the year. Thirteen of these occurred in the North District and Two in the South. The Parochial distribution was as follows:—Cornwood 1, Plympton St. Mary 5, Plympton St. Maurice 5, Shaugh 2, and Ermington 2. On or about March 10th, a great epidemic commenced at Sparkwell (Plympton St. Mary), and spread in succession to Lee Mill, Lutton, Cornwood, Plympton St. Maurice, Lee Moor, and Plympton St. Mary. From enquiries made at the different schools I estimated that at least 250 children were attacked with the disease, whilst at Lee Moor a few young adults were infected. In Plympton St. Maurice the disease was particularly prevalent and virulent amongst children under two years old.

The chief causes promoting the spread of epidemic were:—

- (1) The disease having been absent from the district for so long a time, there was necessarily a very large number of children at the most susceptible ages who were unprotected by a previous attack.
- (2) There is much intercommunication between the parishes, as they not only adjoin each other, but children from one parish attend the schools in the adjoining parish.
- (3) Children were often sent to school in the early and most infectious stages of the disease when they were supposed to be simply suffering from a cold.
- (4) It was almost impossible to isolate any case.

In this epidemic there were 12 deaths, of which 4 were in April, 6 in May, and 2 in June, and eleven of the deaths were of children under 2 years of age. Nine of the children died of Bronchitis or Broncho-Pneumonia, and it is to be noted that the parents of the fatal cases belonged to the artizan or the labouring classes, amongst whom it is unusual to find medical attendance sought for this disease until a fatal issue seems imminent.

The chief measures adopted to stay the epidemic were—the exclusion of infected scholars, and of scholars from infected houses, and so soon as this failed to arrest the spread of the disease, the schools were closed.

Measles is one of the diseases which sanitary measures and legislation seem to have had little or no influence upon either in arresting or making less fatal, and it is still one of the most fatal cases of childhood. The contrast between it and Scarlet Fever is most striking, for whereas parents generally take alarm whenever a child develops Scarlet Fever, and quickly seek the attendance of a medical man, they, on the other hand, accept an attack of measles as a matter of no moment, and think that any old woman with her cup of saffron tea will suffice to “cure the measles.” That measles is one of the most serious diseases a child can have, and that it requires careful and skilful treatment cannot be too strongly or too frequently stated, and if parents would only realise more acutely the dangers of the disease, I have no hesitation in saying that the deaths from it might be greatly lessened. In our own particular district during the past ten years there have been 76 deaths from measles, whilst only 6 have died from Scarlet Fever, and yet people get frightened at a case of the latter, whilst they look with equanimity on the former, and some even go so far as to wilfully expose their children to the disease, because forsooth a “child must have the measles,” and “’tis good to get it over.”

Whooping Cough. Although there was no marked epidemic of this disease during the year, yet several cases occurred in different parts of the district, and caused five deaths; there being one in Plympton St. Mary, two in Ermington, one in Plymstock and one in Wembury.

Although it is a disease for which much can be done by skilful and careful treatment, yet it is still one of the most fatal diseases of child life, and there is no doubt that it is so fatal chiefly because of neglect and ignorance.

The parents of the poorer classes, either because they underestimate the dangers of whooping cough, or because of their inability to pay for the necessary medical treatment frequently fail to send for a doctor until the child is attacked with the additional burden of Broncho-Pneumonia, and when it is thus almost beyond medical skill.

Scarlet Fever. During the year 28 cases of this disease were notified as against 45 during 1902. There was no distinct epidemic but the cases appeared continuously throughout the year, the notifications being recorded as follows:—In February, 1; in March, 4; in April, 5; in June, 1; in July, 2; in August, 2; in September, 4; in October, 4; in November, 2; and in December, 3.

The parochial distribution of the cases was as follows:—

In Compton	3 were notified	from Feb. 15th to Sept. 28th.
„ Egg Buckland	1 was „	on Dec. 21st.
„ Plympton St. Mary	12 were „	from Mar. 16th to Oct. 7th.
„ St. Budeaux	7 „ „	„ Mar. 9th to Dec. 21st.
„ Holbeton	1 was „	on Nov. 30th.
„ Plymstock	1 „ „	„ Sept. 8th.
„ Revelstoke	3 were „	from Oct. 14th to Nov. 8th.

I am glad to state that of these 28 cases only 1 (that in Compton), proved fatal, and that was the only fatal case of this disease which has occurred in the District since 1898. There is no doubt people realize much more than they formerly did the necessity for care and skill in the treatment of this disease, and very few cases of Scarlet Fever therefore escape proper medical supervision. This is in a striking contrast to the carelessness and haphazard way in which the parents of the poorer classes regard the more serious disease of measles—to this I refer in greater detail in my remarks on that disease. One of the cases notified affords a striking example of the way in which infectious diseases are sometimes widely diffused—A person was taken ill whilst on a holiday in Westmoreland, and after a few days, being well enough to travel, came back by train to this district, when, on being seen by his doctor, he was proved to be in the peeling stage of Scarlet Fever.

Of the cases notified two were, owing to the unfavourable circumstances under which they occurred, removed to the Plymouth Hospital, and the remaining cases were successfully treated at their homes.

The number of houses infected was 20.

17 houses with one case only in each.

4 „ „ two cases in each.

1 house with three cases.

The age distribution of the cases was as follows:—

Under 1 year, 1 ; 1 year and under 2, 3 ; 2 years, 1 ; 4 years, 2 ; 5 years, 5 ; 6 years, 2 ; 7 years, 4 ; 8 years, 1 ; 9 years, 1 ; 10 years, 1 ; 12 years, 1 ; 15 years, 1 ; 17 years, 1 ; 20 years, 2 ; 25 years 1 ; 27 years, 1 ; 28 years, 1.

Diphtheria. Nine cases of this disease were notified as follows:—

Plympton St. Mary 3, Shaugh 1, St. Budeaux 1, Weston Peverell 1, and Plymstock 3. Only one of these was fatal,

viz. that in Shaugh. All the cases but one were treated at their own homes, and all the cases were between the ages of 4 and 12. There is a marked fall in the number of cases as compared with 1902 and 1901.

It is often difficult to prove the origin of a case of diphtheria, during the year two cases came under my notice which shew how the disease is sometimes ignorantly spread. My attention was called to two children in whom I found distinct evidences of a recent attack of Diphtheria. Both children had paralysis of the palate, and loss of knee jerk, and the father, after cross examination, admitted that they had had sore throats. It is true that they had been kept away from school, but it was not until all local evidence of the "sore throat" had disappeared, and not until the difficulty in swallowing and speech appeared that a Doctor was sent for. I have little doubt but that for the appearance of these two latter symptoms, the children would have been sent back to school without any effort at disinfection having been made! In the present cases I had the rooms, etc. disinfected, and the children were forbidden to attend school until I had satisfied myself, by bacteriological examination, that they could safely do so.

Enteric Fever. Five cases were reported during the year as follows:—One at Bickleigh, in May. This was contracted at Buckfastleigh. One at Luton, in July, for which no local cause could be found, and which proved fatal. One at Plympton St. Mary, in October, which could not be proved to be due to any local sanitary defects. One at Cornwood, in July, which was imported from Birmingham. One at Plymstock, in December, which was fatal, and of which the probable cause was the eating of uncooked cockles taken from the sewage-polluted foreshore of Hooe lake.

In September a small outbreak of Enteric Fever in Plymouth aroused suspicion attaching to a milk supply derived from a

farm at Brixton. To this farm a surprise visit was made by Dr. Williams, Medical Officer of Health of Plymouth, and myself, and I am very glad to say the suspicion proved quite unfounded, for not only did we find no local evidence to support the suspicion, but bacteriological examination of the milk and water supply of the farm gave negative results.

Diarrhœa. There was no epidemic of this disease. This was probably due to the prolonged wet weather during the autumn months, and the comparatively low temperature which then prevailed. Only three fatal cases were reported, 1 in Compton, 1 in Plympton St. Maurice, and 1 in St. Budeaux.

Puerperal Fever. One case only was reported, and that a fatal one. After investigation I decided that the case could not be due to any local insanitary conditions, but was probably due to auto-infection.

Phthisis and Sanatoria. I am sorry to record that 15 deaths were due to this disease as compared with 10 in 1902.

The death rate from Tubercular diseases is gradually becoming to be considered an important indication of the sanitary state of a district, for there is no doubt that the genesis and spread of these diseases are largely influenced by the existence of such insanitary conditions as absence of sunlight, damp and badly drained subsoil, imperfect ventilation of buildings with overcrowding ; and personally I expect much greater benefit from the enforcement of measures by which these faults will be prevented than I do from any other means, for it may be safely said that a "given sum of money invested in erecting well built and properly situated houses would do more towards the permanent reduction of the death rate from Phthisis than many times the same sum expended on the building and support of sanatoria.

It is obviously impossible to segregate into Sanatoria even a small proportion of the large number of people who, in this country are suffering from Phthisis; and it seems almost foolish to expect that the isolation and treatment of a few of these people for a few months will produce any marked effect on the general prevalence of the disease, or reduce its death rate in any way proportionate to the cost which such treatment involves. Sanatoria must therefore be regarded mainly as institutions for dealing with the results of Tuberculosis, and although it is unfair to class them amongst those "indispensible means which have to be taken by sanitary authorities for the prevention of disease," yet it cannot be denied that they afford a most useful and successful method of dealing with individual cases of Phthisis—and of this we have had proof during the past year. I hope therefore, that the support which you have given to the Didworthy Sanatorium will be continued, for although all the patients sent there do not recover, yet most of them receive distinct benefit and are able to return to work, whilst all are educated and trained to regulate their lives in the best way for themselves and in the safest way for their relations and neighbours. Time only will prove whether these people will continue to exercise in their own homes the wise discipline of the Sanatorium life or whether they will lapse again into living in shut up rooms, and sleeping in ill ventilated bed rooms. It is no uncommon thing for me to find a cottager's bedroom at night unbearably "stuffy," not only because the window is tightly closed but also because the chimney is carefully filled up with straw or old clothes, and further because a lamp is often kept burning the whole night through!! The ordinary working man and his wife are terribly prejudiced against ventilation and other measures designed for the preservation of health, and this in spite of the fact that health is the working man's most valuable asset, a fact however, which generally speaking, he can only be made to realize when he has lost it.

Again it must not be forgotten that a very important part of sanatorium treatment is abundant feeding (so abundant indeed

as to be called by some, over-feeding), and that the food there provided is properly cooked. These factors are, of course, those which the returned patient will find the greatest difficulty in continuing, for not only will his earnings probably prove insufficient for them, but even if he could provide the food, his wife would probably spoil a lot of it in so-called cooking, seeing that the art of economical cooking is one which the ordinary cottager's wife is not only very ignorant of, but almost despises. All her efforts are usually expended in providing a "good" dinner for Sunday, and for the other days of the week anything will do, and porridge is an almost unknown food.

Closure of Schools—

				Cause
Sparkwell	...	March 10	4 weeks	Measles
Lee Mill	...	March 22	3 "	"
Cornwood and Lutton		April 21	4 "	"
Plympton St. Maurice		May 5	3 "	"
Plympton St. Mary...		June 1	3 "	"
Ern ington	...	June 24	3 "	"

TABLE I.—FOR WHOLE DISTRICT.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			Total Deaths as registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number.	Rate.	Under 1 year of age		At all ages.		Number.				Rate.	
				Number.	Rate per 1000 births registered	Number.	Rate.						
1	2	3	4	5	6	7	8	9	10	11	12	13	
1893	22028	607	27'55	66	108'7	389	17'65	27	17	..	372	16'88	
1894	22297	554	24'84	64	115'5	360	16'14	20	7	..	353	15'83	
1895	22443	623	27'75	60	96'3	378	16'84	29	12	..	366	16'30	
1896	23000	615	26'73	71	115'4	336	14'60	23	4	..	332	14'43	
1897	22090	616	27'88	95	154'2	337	15'25	14	2	..	335	15'16	
1898	22850	607	26'56	101	166'39	362	15'84	12	2	..	360	15'75	
1899	19070	456	23'91	61	133'77	323	16'94	15	7	2	318	16'67	
1900	19262	455	23'62	47	103'29	295	15'31	19	4	0	291	15'10	
1901	19780	471	23'81	40	84'92	248	12'53	11	1	1	248	12'53	
1902	20010	435	21'73	40	91'95	235	11'74	8	3	1	233	11'64	
Averages for years 1893-1902	21283'0	543'9	25'55	64'5	118'58	326'3	15'33	17'8	5'9	0'4	320'8	15'07	
1903	20300	485	23'89	51	105'15	280	13'79	13	2	1	279	13'74	

* Rates in Columns 4, 8, and 13, calculated per 1,000 of estimated population.

NOTE.—The details included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

† By the term "Non-residents" is meant persons brought into the district on account of illness, and dying in public institutions here. ‡ By the term "Resident" is meant persons who have been taken out of the district on account of illness, and have died in public institutions elsewhere.

TABLE II.

Year.	Whole District.				North or Plympton Sub-District.				South or Yealmpton Sub-District.			
	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population estimated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
1893	22028	607	372	66	13858	384	231	41	8170	223	141	25
1894	22297	554	353	64	14152	364	226	42	8145	190	127	22
1895	22443	623	366	60	14323	425	241	42	8120	198	125	18
1896	23000	615	332	71	14900	420	239	55	8100	195	93	16
1897	22090	616	335	95	14014	425	211	67	8076	191	124	28
1898	22850	607	360	101	14800	407	236	70	8050	200	124	31
1899	19070	456	318	61	11043	278	181	33	8027	178	137	28
1900	19262	455	291	47	11259	261	183	28	8003	194	108	19
1901	19780	471	248	40	11800	293	157	27	7980	178	91	13
1902	20010	435	233	40	11930	268	153	30	8080	167	80	10
Average for Years 1893 to 1902	21283.0	543.9	320.8	64.5	13207.9	352.5	205.8	43.5	8075.1	191.4	115.0	21.0
1903	20300	485	279	51	12060	284	182	30	8240	201	97	21

NOTES.—(a) Deaths of residents occurring beyond the district are included in sub-columns (c) of this table, and those of non-residents registered in the district excluded.

(b) Deaths of residents occurring in public institutions are allotted to the respective localities, according to addresses of the deceased.

TABLE III.

Cases of Infectious Diseases Notified during the Year 1903.

Notifiable Diseases.	Cases Notified in whole District.							Total cases notified in each Locality.				No. of cases removed to Hospital from each locality.	
	At all ages.	At Ages—Years.											
		Under 1	1 to 5.	5 to 15.	15 to 25.	25 to 65	65 and upwards	Plympton or North.	Yealmp-ton or South.	Plympton or North.	Yealmp-ton or South.		
Small-pox	0	...	...	...	...	...	...	...	...	...	...
Cholera	0	...	...	...	...	...	...	...	...	...	...
Diphtheria	7	...	1	6	...	...	...	4	3	1	...
Membranous Croup	2	...	...	2	...	...	...	2	...	...	...
Erysipelas	9	...	...	1	...	5	3	5	4	...	...
Scarlet Fever	28	1	6	14	4	3	...	23	5	3	...		
Typhus Fever	0	...	...	...	...	...	...	...	...	...	...
Enteric Fever	5	...	...	3	1	1	...	4	1	...	...
Relapsing Fever	0	...	...	...	...	...	...	...	...	...	...
Continued Fever	0	...	...	...	...	...	...	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	...	1	...	...	...
Plague	0	...	...	...	...	...	...	...	...	...	...
TOTALS	52	1	7	26	5	10	3	39	13	4	...		

Isolation Hospitals used—Plymouth Borough Hospital and Devonport Borough Hospital—by arrangement with the respective Authorities.

TABLE IV.

Causes of, and Ages at, Death during Year 1903, excluding deaths of non-residents.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							Deaths in Sub-Districts (at all ages).		Deaths in Public Institutions.
	All Ages	Under 1	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	North or Plympton.	South or Yealmpton.	
Small-Pox ...	...	...	...	...	...	...	...	13	2	...
Measles ...	15	2	12	1	...	...	...	1	...	...
Scarlet Fever ...	1	...	...	1	...	...	...	1	4	...
Whooping Cough ...	5	3	2	...	...	...	...	...	...	...
Diphtheria & membranous croup ...	1	...	...	1	...	...	...	1	...	...
Croup ...	...	...	...	...	...	...	...	...	...	...
Fever } Typhus	...	...	...	...	...	...	...	...	...	...
Enteric } Typhus	2	...	...	1	...	1	...	1	1	...
Other continued ...	...	...	...	...	...	...	...	...	...	...
Epidemic influenza ...	8	1	...	...	...	5	2	6	2	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	3	1	2	...	...	...	...	3	...	...
Enteritis ...	3	2	1	...	...	...	...	2	1	...
Puerperal Fever ...	1	...	...	...	1	...	...	1	...	...
Erysipelas ...	...	...	...	...	...	...	...	...	...	...
Other septic diseases ...	2	1	...	...	...	...	1	1	1	...

TABLE IV.—Continued.

Phthisis	15	...	...	3	11	1	10	5	2
Other tubercular diseases...	5	...	...	2	1	...	2	3	...
Cancer, malignant disease	10	...	...	...	6	4	5	5	...
Bronchitis	17	...	1	...	...	9	9	8	...
Pneumonia	26	...	...	1	4	6	16	10	...
Pleurisy	1	...	...	...	...	1	1	...	...
Other diseases of Respiratory organs	4	...	...	...	3	1	2	2	...
Alcoholism	3	...	...	..	3	...	3	...	...
Cirrhosis of Liver	...	...	...	...	...	...	..	..	...
Venereal Diseases	...	...	...	...	...	...	2	3	...
Premature Birth	5	5	...	...	...	...	...	3	...
Diseases and accidents of parturition	1	...	...	1	...	...	1	...	...
Heart diseases	31	1	3	...	11	16	20	11	...
Accidents	8	2	1	1	2	2	4	4	...
Suicides	3	...	...	...	3	...	2	1	...
Rheumatic Fever	...	...	...	...	9	...	...	...	...
Diseases Nervous System	24	2	...	2	...	11	15	9	1
Convulsions	4	3	...	...	...	...	3	1	...
Old Age	48	...	...	...	...	48	36	12	8
Diabetes	4	...	...	...	...	2	4	...	...
All other causes	29	12	1	4	8	4	17	12	2
All causes	279	51	10	15	69	108	182	97	13

TABLE V.

Shewing the number of Deaths from principal Zymotic Diseases in the District from 1893 up to and including 1904.

DISEASE.	Average for 1883-90.	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903.	Annual Rate per 1000, 1903.	Annual Rate for England & Wales, 1903
Small Pox ..	0	0	0	0	0	0	0	0	0	0	0	0	0	
Measles ..	5.2	5	0	8	27	3	13	5	0	3	2	15	.73	
Scarlet Fever ..	4.7	13	1	2	1	0	1	0	0	0	0	1	.049	
Whooping Cough ..	8.1	5	19	3	1	5	17	4	1	0	4	5	.24	
Diphtheria and Membranous Croup	2.6	0	3	3	6	1	2	1	5	2	6	1	.049	
Enteric or Typhoid Fever ..	4.5	1	1	5	1	0	3	3*	1	1†	0	2	.098	
Diarrhœa ..	7.4	17	7	7	12	13	26	17	11	5	3	3	.14	
Other Zymotic Diseases, <i>e.g.</i> : Erysipelas, Croup, and Puerperal Fever ..	not recorded	5	0	1	3	3	0	2	0	0	1	1	.049	
Total ..	32.5	46	31	29	51	25	62	32	18	11	16	28	1.37	1.08

* Of these, two occurred in the Plymouth Borough Hospital.

† This occurred in the Plymouth Borough Hospital.

TABLE VI.

Quarterly Distribution of Cases of Infectious Diseases with the Deaths therefrom.

NOTIFIABLE.—Cases and Deaths therefrom.

Disease.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Whole Year.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Small Pox .. ..	..	..	..	..	..	..	..	..	..	..
Cholera .. ..	..	..	..	..	..	..	..	..	..	..
Diphtheria and Membranous Croup	..	..	2	..	2	..	5	1	9	1
Erysipelas	6	..	..	..	3	..	..	..	9	..
Scarlet Fever ..	5	1	6	..	8	..	9	..	28	1
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..
Enteric Fever ..	..	..	1	..	1	1	3	1	5	2
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever ..	..	..	1	1	..	..	..	..	1	1
Total	11	1	10	1	14	1	17	2	52	5

NON-NOTIFIABLE.—Deaths only.

Measles	..	..	1	13	1	..	..	15
Whooping Cough	..	..		3	2	..	..	5
Diarrhoea	..	..	..	..	3	..	..	3
Influenza	..	..	4	4	..	..	..	8
Phthisis	..	..	2	4	8	1	..	15
Total	..	..	7	24	14	1	..	46

North Sub-District.

TABLE VII.
INFECTIOUS DISEASES NOTIFICATION ACTS.

Table shewing the Parochial distribution of cases notified under the above Act, and the Deaths from Notified Diseases.
The total number printed in large figures, the deaths in small figures.

PARISH.	Small Pox.	Cholera.	Diphth'ria & Mem. Group.	Erysipelas	Scarlet Fever.	Typhus Fever.	Enteric or Typhoid Fever.	Relapsing Fever.	Continued Puerperal Fever.	Total Notified.	Total Deaths
Compton	3 ¹	..	..	..	..	3	1
Bickleigh	1	..	..	1	..
Cornwood	2 ¹	..	..	2	1
Egg Buckland	1	..	..	..	..	1	..
Harford
Weston Peverell	1	..	..	..	..	..	..	1	..
Plympton St. Mary	3	4	12	..	1	..	1 ¹	21	1
Plympton St. Maurice..	1	..	..	..	..	..	1	..
St. Budeaux	1	..	7	..	..	..	..	8	..
Shaugh	1	..	..	..	..	..	..	1	1
Tamerton Folliott
Total North	6 ¹	5	23 ¹	..	4 ¹	..	1 ¹	39	4

INFECTIOUS DISEASES NOTIFICATION ACT.

Table shewing the Parochial Distribution of cases notified under the above Act, and the deaths from the Notified Diseases.

The total number printed in large figures, the deaths in small figures.

PARISH.	Small Pox.	Cholera.	Diphtheria and Membr. Group.	Erysipelas	Scarlet Fever	Typhus Fever	Enteric or Typhoid Fever	Relapsing Fever	Continued Fever	Puerperal Fever	Total Notified	Total Deaths
Brixton
Ermington
Holbeton	I	..	..	..	..	..	1	..
Newton Ferrers	I	..	..	..	..	..	..	1	..
Plymstock	3	I	I	..	I 1	..	..	..	6	I
Revelstoke	3	..	..	..	..	..	3	..
Wembury	I	..	..	..	..	..	..	1	..
Yealmpton	I	..	..	..	..	..	..	1	..
Total South	3	4	5	..	I 1	..	..	..	13	I
Total North	6 I	5	23 I	..	4 1	..	..	I 1	39	4
Total Whole District	9 I	9	28 I	..	5 2	..	..	I 1	52	5

TABLE IX.

Table showing Parochial Distribution of Deaths, from Zymotic Diseases, Phthisis, and Cancer.

NORTH SUB-DISTRICT.	Small Pox.	Cholera	Diph- theria and Mem- branous Croup.	Ery- sipelas	Scarlet Fever.	Typhus Fever.	Enteric or Ty- phoid Fever.	Relap- sing Fever.	Puer- peral Fever.	Measles	Diarr- hoea.	Whoop- ing Cough.	TOTAL Zy- motic Dis- eases.	Phth- isis.	Cancer.
Bickleigh	1
Compton	1	..	..	..	..	..	1	..	2	..	..
Cornwood	1	..	..	1	..	..	2	..	..
Egg Buckland	1	..
Harford
Weston Peverell
Plympton St. Mary	1	5	..	1	7	6	2
Workhouse	2	..
Plympton St. Maurice	5	1	..	6	..	..
St. Budeaux	1	..	1	1	2
Shaugh	1	..	..	..	..	..	..	2	..	..	3	..	..
Tamerton Folliott
TOTAL, NORTH	1	..	1	..	1	..	1	13	3	1	21	10	5

TABLE X.

Table showing Parochial Distribution of Deaths from Zymotic Diseases, Phthisis, and Cancer—*Continued*.

SOUTH SUB. DISTRICT.	Small Pox.	Cholera	Diph- theria & Mem- branous Group.	Ery- sipelas.	Scarlet Fever.	Typhus Fever.	Enteric or Typhoid Fever.	Re- lapsing Fever.	Puer- peral Fever.	Measls	Diarr- hoe.	Whoop- ing Cough.	Total Zy- motic Dis- eases.	Phthi- sis.	Cancer.
Brixton
Ermington	2	..	2	4	..	1
Holbeton	1	..
Newton Ferrers	2	..
Plymstock	1	..	..	..	..	1	2	2	3
Revelstoke
Wembury	1	1	..	..
Yealmpton	1
Total South	1	..	..	2	..	4	7	5	5
Total North	1	..	1	..	1	..	1	13	3	1	21	10	5
Whole District	1	..	1	..	2	..	1	15	3	5	28	15	10

EPITOME OF THE MORE IMPORTANT WORK DONE DURING THE YEAR.



1. In **Egg Buckland** and **Compton Gifford** an important part of the drainage scheme has been done.
2. In **Crown Hill** and **Honicknowle** (St. Budeaux), considerable progress has been made in the drainage scheme.
3. In **Brixton Village** the new drainage scheme has been commenced.
4. A Caretaker's Cottage has been erected near the Small-Pox Hospital.
5. Sanction has been obtained for the sewerage of **Hooe Village** (Plymstock).
6. In **Plymstock**. 44 additional houses have been supplied with the public water.
A new sewer has been laid through the village.
7. In **Plympton St. Mary** and **Plympton St. Maurice** considerable improvements have been made in the sewers, and 10 houses have had the public water laid on.
8. The **Bye-laws** have been sent on to the Local Government Board for sanction.
9. Much important work has been done under the **Dairies and Cowsheds' Order** and the **Workshops and Factories Act**.
10. In **Ermington** a large number of houses have been connected to the main sewer.

Methods of Dealing with Infectious Disease. The Infectious Diseases Notification Act and the Infectious Diseases Prevention Act are in force in the district, and so I not only obtain knowledge of every case of important infectious disease, but am able to deal with it promptly. On receipt of a notification I immediately send printed instructions (applicable to the notified disease) to the householder, and this is followed by a visit from the Sanitary Inspector, who sees that disinfectants are used, and that the patient is isolated as well as the circumstances of the house will permit. In cases where he is doubtful he communicates with me, and I then visit the house, and where isolation is impossible I endeavour to obtain the removal of the patient to the Plymouth Borough Isolation Hospital. The Rural District Council has an arrangement with the Town Council of Plymouth for that purpose. At the conclusion of the case the house, bedding, etc., are carefully disinfected.

Small Pox. For dealing with cases of this disease I am very glad to be able to report that the Council now possess a good hospital. It is a well-constructed building of wood and iron, and is situated in an isolated situation on the road between Lee Mill Bridge and Sparkwell. It has four separate pavilions with connecting passages, and there are two large wards for four beds each, and two small observation wards with two beds each, in addition there is an administration block with rooms for the doctor, the matron, and the nurses. There is also a detached building appropriately divided as a mortuary, an ambulance shed, a fumigating chamber and a washhouse.

There is a good well in the adjoining land from which properly distributed cold and hot water supplies are carried throughout the building. Each ward is provided with its own bath room and closet.

During the year a caretaker's cottage has been erected, and a caretaker appointed.

With regard to vaccination, I am sorry that there is no immediate prospect of the introduction of compulsory re-vaccination, for although sanitary officials are always on the alert to isolate as promptly as possible a case of small pox wherever and whenever it occurs, yet it must be remembered that, in spite of the fact that primary vaccination is in most districts throughout England fairly general, yet there are some districts in which Boards of Guardians are very lax in enforcing the law, and anti-vaccinators are still an active force in the land. Whilst this remains small pox may at any time assume a dangerously epidemic form, proof of which has not been wanting during the last few years. And it must also be remembered that an epidemic in one district is, with modern facilities of travel, a danger to the country at large.

Scavenging.—The work under this heading has considerably increased during the year, for the Council has undertaken to remove refuse from the several forts, which are situated in St. Budeaux, Egg Buckland, and Plymstock, and a more frequent and regular collection of house refuse has been established in the two Plymptons. The public collection of house refuse is made as follows :—

Plympton St. Mary	Ridgeway	..every Tuesday
	Underwood	.. ,, Thursday
	Colebrook	.. ,, Friday.
Plympton St. Maurice	...	every Wednesday.
Plymstock	Oreston	} three times a a week
	Pomphlett	
	Billacombe	
	Hooe and	
	Turnchapel	
St. Budeaux	Crown Hill and	.. three times
	Honicknowle	.. a week.
Compton	..	.. once a week.

Offensive Trades. There is a factory at Batten (Plymstock) for the manufacture of manure from fish offal, and although there are occasional complaints as to the smells arising therefrom, I have not, on my surprise visits, detected anything to warrant legal action.

At Compton there are brickworks of which complaint was made, but I could not advise the Council to take any action thereon.

Bye-Laws. The Council possess powers with Bye-Laws, applicable to

New Buildings.
Alterations of Buildings.
Slaughter Houses.
Prevention of Nuisances.
New Streets and Buildings.

The Bye-Laws with regard to New Buildings have been carefully revised and submitted to the Local Government Board. They were returned with some minor alterations and are now ready for final approval by the Council. The object of the revision is to render the erection of houses less expensive, and so promote the building of cottages. Whether this latter object will be attained has yet to be proved, but at any rate it is certain that under the new bye-laws it will be far less expensive and less difficult to build.

Under the heading of Bye-Laws I wish to call the attention of the Council to two County Council Bye-Laws which are applicable throughout this district, although up to the present I can recall no instance in which they have been enforced.

They are:—

1. No person shall carry or convey through or along any street or public place the undressed carcase of any animal or any offensive offal unless the same respectively be properly covered.

2. No person shall in any street or public place to the obstruction, annoyance, or danger of the residents or passengers commit the following offence, that is to say :—

“Throw or lay any dirt, litter, or ashes, or night soil or any carrion, fish, offal or rubbish, on any street, or cause or permit any offensive matter to run from any manufactory, brewery, slaughter-house, butcher’s shop or dunghill, into any street.”

Street is defined to mean and include any highway, public bridge, any road, lane, bridle way, footway, square, court, alley or passage open to the public, whether a thoroughfare or not.

There are several cases in our district where offensive fluid drains on to the highway, and which it would be difficult to prove a nuisance under the Public Health Acts, but which I think might easily be dealt with under the above bye-law.

The Housing of the Poor. I am glad to chronicle that you as a District Council have officially supported the object and aims of the Rural Housing and Sanitation Association, and I cannot refrain from expressing the hope that this Association will help to stay the exodus of the people from the country to the town. All investigation goes to prove that the more a population lives in the country, the stronger and healthier are its individuals, and *vice versâ*, that there is a direct and definite connection between degeneration and town life. It cannot be too strongly or too often repeated that if Englishmen are to maintain their physical and moral tone, they must to a very large extent be “bred in the country.” One of the great causes of the migration towards the town is that the small country houses either lack the conveniences of those in the towns or from faulty construction or want of repair are less comfortable, and indeed it is generally admitted that many of the cottages in which the labourers live are either almost unfit for human habitation or are overcrowded to a dangerous extent, although

on the other hand it is almost impossible to legally prove either of these facts. To the question why no remedy is found for such a state of things the reply is always "that cottage property, either new or old, cannot be made to pay." But cottage property ought to be made to pay, either directly or indirectly, and if the individual landlord is unable or unwilling to provide decent dwellings for his tenants or servants, the State, either through the County or District Councils, should intervene and provide the necessary cottages. This is no new doctrine, for on all sides we see the State, when represented by an Urban Authority, undertaking work and responsibilities which have hitherto devolved upon individuals. What an Urban Authority may do, a Rural Authority should also be permitted to do, and Parliament might reasonably be asked to formulate a scheme, financed if necessary by an Imperial Tax, by which rural authorities could borrow money on reasonable and profitable terms for the building of cottages in which the farm labourer could live in comfort and decency. Farmers are everywhere complaining of the scarcity of labour, and they find it almost impossible to obtain labourers because they can so rarely offer houses which are attractive. It must be remembered that what was good enough 50 years ago is not good enough now, for the agricultural labourer is no longer what he was. Compulsory education has created in him the desire for better things, and the young men and young women will not now submit to live in such houses or under the conditions with which their grand parents were quite content. The result is seen in the constant immigration to the towns and the increased numbers of the irregularly employed.

FACTORY AND WORKSHOP ACT, 1901.

During the year I have inspected 53 workshops and factories by surprise visits. Many of these I have inspected twice, and I am glad to report that the great majority have been found to be in a satisfactory condition. Of the bakehouses inspected in 1902, two have been closed, one because of the unsatisfactory

condition of the premises, and the other because of want of success in business. There are no "underground" bakehouses in the district, although there is one, of which the floor is below the level of the adjoining road.

Of the defects referred to in the report for 1902, many have been remedied, whilst some others have been discovered, *e.g.* In several of the smaller business premises I found closets inefficiently flushed or kept in bad condition. These defects I shall hope to see remedied so soon as certain public sewers which are in course of construction, and into which such closets will drain, are completed. At one bakehouse I found no closet accommodation whatever, this the owner has promised to provide. At one factory the earth closets were improperly kept, the proprietor has promised to attend regularly and properly to them in future.

At one dressmaker's establishment I found an over-crowded room. This was remedied by the provision of a larger and better ventilated room as workshop.

In the great majority my inspections were welcomed by the occupiers.

In addition to the bakehouses, I have inspected the following :

3 Laundries.

21 Factories and Workshops—including Brick works, Manure works, Paper Mills, Coach-Building premises, Saddlers' shops, Dressmakers' and Tailors' workrooms.

The following are the chief Improvements produced during the year by my inspections:—

1. **Bakehouse.** Floor re-paved and well drained. Walls made smooth by plastering, and additional window provided.

2. **Bakehouse.** Floor repaired and made to drain towards door. Walls plastered and whole place kept generally cleaner.

3. **Bakehouse.** Inside sink removed.

4. **Bakehouse.** Kept in much cleaner condition.

5. **Bakehouse.** Floor repaired. Inside sink removed and replaced by open pipe through wall and discharging over gully trap outside bakehouse.

6. **Bakehouse.** General condition much improved.

7. **Bakehouse.** Many repairs to floor and wall carried out.

8. **Bakehouse.** Entirely re-built on modern principles.

9. **Bakehouse.** Entirely re-modelled.

10. **Bakehouse.** Shut up because owner considered it would not pay to carry out certain necessary structural alterations.

11. **Factory.** Unsatisfactory wooden closets destroyed and re-placed by well-built stone ones on earth-bucket system.

12. **Factory.** Earth closets kept in much better condition by being placed under the care of one workman.

13. **Dressmaking Room.** Better ventilation provided.

Homeworkers. During the year I have received from the Plymouth Authority the names of two people by whom dress-making is taken home from Plymouth establishments.

Dairies, Cowsheds, and Milkshops' Orders. Very important work has been done by Mr. Horton under these orders during the year, for the particulars of which I refer to his report.

During the year the Council have decided that, in future, plans must be deposited for new cow-houses and shippens, and that each plan shall shew the cubic contents and floor space per cow ; and further, that no existing building shall be recognised unless there be at least 300 cubic feet of air space for each cow, and that all new buildings must provide at least 450 cubic feet of air space and 64 square feet of floor area per cow. This latter regulation I consider a very important one, for without it the efficient cleansing of the shippen is almost impossible.

Midwives' Act, 1902. During the year the Council has accepted the administrative powers under this Act delegated to them by the County Council. This Act is an important measure, and if it becomes an active power will in future ensure that no woman shall practise as a midwife without having first proved her fitness for so responsible a position. This reform will, of course, not be accomplished all at once, for existing conditions cannot be altered by a stroke of the pen, and the Act therefore justly allows all who at present practise as midwives to continue to do so, provided they can produce evidence of having been engaged in such work for at least a year prior to July 31st, 1902, and of being trustworthy, sober, and of good moral character, or of possessing a definite legal qualification for the work ; and provided further that they are enrolled on the District Register of Midwives. From and after April 1st, 1905, no woman will be able to style herself a midwife unless she is certified under the Act ; and after April 1st, 1910, no woman will be allowed to practise for gain as a midwife unless she is certified as the Act provides, *i.e.*, by proper training and efficient examination as regulated by the Central Board.

You as a District Council can make yourselves "the Local Committee or you can form such Committee either wholly or partly from your members, and it is desirable that at least two ladies should be elected as members. It will be necessary that the committee nominate an executive officer upon whom it

is obvious a considerable amount of work will devolve for the Central Board, in defining the duties of the midwife, have gone into somewhat minute details, and the success of the act will largely depend on the thoroughness with which the midwives follow the regulations laid down, and which it will be the function of the local Committee to enforce. The chief duties as detailed by the Central Board are as follows :—

1. "To exercise general supervision over all midwives practising within their area in accordance with the rules laid down under the Act.
2. "To investigate charges of malpractice, negligence, or misconduct on the part of any midwife practising within their area, and should a *prima - facie* case be established, to report the same to the Central Midwives' Board.
3. "To suspend any midwife from practise, in accordance with the rules under the Act, if such suspension appears necessary in order to prevent the spread of infection.
- 4 "To report at once to the said Board the name of any midwife practising in their area convicted of an offence.
- 5 "During the month of January of each year to supply the Secretary of the Central Midwives' Board with the names and addresses of all midwives who, during the preceding year have notified their intention to practise within their area, and to keep a current copy of the roll of midwives accessible at all reasonable times for public inspection.
6. "To report at once to the Central Midwives' Board the death of any midwife, or any change in the name or address of any midwife in their area, so that the necessary alteration may be made in the roll.
7. "To give due notice of the effect of the Act as far as practicable to persons at present using the title of midwife.

From enquiries I have made I find there are 43 women in the district at present doing work as midwives. Whether all of these will either be fit to register or willing to do so I am unable at present to state; but I think the probability is that several of them will prove unwilling to submit to supervision under the Act.

Weather and Rainfall during 1903.—

It has been a record year, for the rainfall has largely exceeded that of many years past.

At Langham Hall 56·47 inches, with 227 wet days were registered; at Thorncott, Higher Hooe, 49·31 inches, with 235 wet days, were registered; and at Plymouth, 45·76 inches, with 229 wet days, were registered.

A wet day is one on which at least ·01 inch of rain is registered. It is estimated that 1 inch of rain falling on 2 square feet of land is equal to a gallon of water, or about 100 tons of water per acre.

The records for the year are as follows:—

L.H.—Langham Hall, Ivybridge. T.C.—Thorncott, Higher Hooe. P.—Plymouth.

MONTH.	Total Depth.			Greatest fall in 24 hours.						Number of days on which .01 inch or more fell.		
	L.H.	T.C.	P.	Depth. L.H.	Date.	Depth. T.C.	Date.	Depth. P.	Date.	L.H.	T.C.	P.
January	5'85	4'40	4'84	inches. 1'60	4	inches. 1'37	4	inches. 1'43	4	24	22	21
February	2'81	2'66	2'12	0'38	25	'45	1	'32	25	18	17	19
March	6'41	5'30	4'75	0'78	17	'56	7	'51	9	27	26	26
April	1'95	1'88	1'58	0'50	25	'42	25	'43	25	15	16	14
May	3'13	1'86	2'01	1'03	2	'82	2	'82	2	15	16	16
June	1'37	3'39	3'28	0'46	14	2'09	19	2'21	19	12	10	10
July	4'78	4'55	3'95	1'15	25	'78	25	'68	21	14	19	18
August	5'21	4'18	3'77	0'88	13	'94	23	'99	23	18	23	21
September	4'64	4'44	4'44	0'99	28	'80	1	'75	1	15	16	15
October	10'59	8'49	7'62	0'91	10	1'03	26	'72	26	30	30	30
November	2'87	2'00	1'86	0'80	27	'52	26	'56	27	18	17	17
December	6'86	6'16	5'54	1'63	12	1'41	12	1'57	12	21	23	22
Total for Year	56'47	49'31	45'76	—	—	—	—	—	—	227	235	229

A reference to the appended table will show how general the rainfall was, and that the nearer to Dartmoor the greater it was.

At **Langham Hall** the average rainfall is computed as 47·50 inches. Since observation began in 1888 the rainfall of 1903 has been exceeded only in 1891 and 1894. In the former year during March was a severe blizzard, and in that year 58·92 inches of rain were recorded. In 1894 the rainfall was 56·89 inches.

The number of days on which rain fell in 1903 is the highest since 1888, and the rainfall in October, during which month every day was wet, was 10·59 inches, which is the highest since that year for any calendar month except that for December, 1896, when it was 11·31 inches.

The wettest days in 1903 were January 4th (1·60 inch) and December 12th (1·63 inches), and it is worth remarking that very heavy falls in 24 hours were rare throughout the year, more so than in several much drier years, and also that in each third year since 1888 the rainfall has exceeded 50 inches.

The finest weather in 1903 was from June 20th to July 14th, during which time 37 inches rain fell on 3 days.

At **Thorncott** it was recorded that rain fell every day in October, which was the wettest month of the year, with 8·49 inches.

The greatest number of consecutive days on which rain was recorded was during January 10; February and March, 20; or with the exception of one day, 27; July, 15; August, 12; October and November, 16; or with the exception of one day in October, 33; December 17.

Here the wettest days were January 4th, (1·37 inches), June 19th (2·09 inches), October 26th (1·03 inches), and December 12th (1·41 inches).

At **Plymouth** the wettest days were January 4th (1·43 inches), June 19th (2·21 inches), and December 12 (1·57 inches).

NOTES ON THE EXISTING SANITARY CONDITIONS OF THE VARIOUS PARTS OF THE DISTRICT.

TO BE READ IN CONJUNCTION WITH THE REPORT OF
THE SANITARY INSPECTOR.

NOTE.—I have placed at the beginning of the paragraph relating to each parish the following particulars:—

Area in acres designated by “Area.”

Population as estimated for 1903 designated by “Pop.”

Assessable value for Poor rate purposes designated by “P.R.”

„ „ Special Sanitary Purposes designated by
“Sp. San. P.”

Total amount for which precepts have been issued during the year for Special Sanitary Purposes designated by “Exp.”

N.B.—These precepts are only issued when the amount required demands a rate of 4d. in the £.

Amount which represents the value of a special sanitary rate of 1d in the £ designated by “M.”

BICKLEIGH.

Area 2980. Pop. 295. P.R. £3273. Sp. San. P £3000
Exp. Nil.

The WATER SUPPLY of the villages of **Bickleigh** and **Roborough** is very good, as it is derived from the Plymouth mains which pass through them.

DRAINAGE. **Roborough** is badly drained; the sewers empty into cess-pits which are very near the houses. A good system of drainage could easily be constructed, and an admirable site for irrigation could be chosen; but the landlords are not willing to grant the land.

Bickleigh.

There are no public sewers here, nor are any desirable, as the sewage from each house is disposed of satisfactorily.

COMPTON.

Area 160. Pop. 300. P.R. £2111. Sp. San. P. £1945.
Exp. £100. M. £8 2s. 1d.

The WATER SUPPLY is very good, being from the Plymouth mains.

The DRAINAGE is at present bad, for although the house drains and existing sewers are good, yet they empty into cess-pits, from which the effluent gives rise to recurring nuisances, which have to be dealt with by the Sanitary Inspector. During the year one of these outfalls has been improved.

The coming year will, I am glad to say, see these cess-pits abolished, as much of the new drainage scheme has been constructed.

EGG BUCKLAND.

Area 3149. Pop. 1220. P.R. £11461. Sp. San. P. £8918.
Exp. £250. M. £32 19s. 4d.

The public WATER SUPPLY is very good. The District Council, by consent of the Local Government Board, have an arrangement with the Plymouth Town Council, by which the village is supplied with water from the Plymouth mains. During the year a few additional houses have been thus supplied, and the total number now connected with the mains is 46, including 11 supplied by meter. There are still a few cottages which obtain water from private wells of doubtful character. The sanitary inspector is gradually succeeding in persuading the owners of these cottages to take in the water from the public mains.

The DRAINAGE is at present into a common cess-pit, which gives constant trouble to keep clean. It is very gratifying, however, to announce that during the year a great deal of the comprehensive drainage scheme has been constructed, and that ere long I shall be able to state that the whole of the work has been finished. When this is so the two villages of Compton and Egg Buckland will be well drained in accordance with modern methods.

CORNWOOD.

Area 10680. Pop. 1000. P.R. £8449. Sp. San. P. £7852.
Exp. £25. M. £31.

WATER SUPPLY is very good from the public works. It is taken from deep springs situated on the fringe of Dartmoor, and after being collected in a reservoir is distributed throughout the village by stand pipes. In a few cases householders have taken it into their houses.

The villages of **Corntown** and **Puttypool** also obtain water from this source.

DRAINAGE. The village is well sewered, the drain discharging into a cess-pit from whence the effluent is efficiently irrigated over grass land.

Lutton. WATER SUPPLY very good from public works. The water rises from uncultivated upland sources, and is thence piped to a reservoir and distributed throughout the village by stand pipes.

DRAINAGE. The village is sewered, and the sewage is piped to two cess-pits from which it is irrigated over grass lands.

A few cess-pit closets still remain, and some cottages which have plenty of garden ground have earth closets.

BRIXTON.

Area 3060. Pop. 670. P.R. £4288. Sp. San. P. £2963.
Exp. £120. M. £12.

The public WATER SUPPLY is derived from a moderately deep well, and reaches the villagers through two public pumps. Whilst the quantity of water seems sufficient for ordinary domestic uses, yet it will, doubtless, prove too little for any effective flushing of the new sewers which are being now laid.

As the well is situated in a position which renders the water liable to pollution, I cannot but repeat my previous advice, that a new supply is desirable.

The new drain which is being laid will partially lessen the danger of pollution.

DRAINAGE. This is at present bad. The sewers discharge into three cess-pits, from which it is irrigated over grass lands. The year has, however, seen the completion of negotiations, by which two of these cess-pits will be abolished and the sewage diverted to a more suitable place, where a septic tank will be built. A large length of main sewer will also be put down, and it will then be possible to drain many of the houses more effectually and safely than has hitherto been done. Where the closets are not connected with the drains they are on the bucket or cess-pit system.

Toore, Coombe, and Hornicombe. These hamlets are provided with a good and ample supply of water, which is distributed through public taps.

In neither of them is there any sewage system, and as all the houses have gardens attached, I don't think one is desirable.

Spriddlestone. WATER SUPPLY is from a public pump fixed over a shallow well. The yield is sufficient, and I have not yet found any suspicion of impurity.

There are no sewers, nor are any necessary

ERMINGTON.

Area 4920. Pop. 850. P.R. £5814. Sp. San. P. £3866.
Exp. £30. M. £16 2s. 2d.

WATER SUPPLY. The public supply is from a well which yields plenty of water, which is piped to a public tap. There are several other private wells in the village. The public well is situated so near to the graveyard that I have at intervals analysed the water, but have found no reason as yet to doubt its purity. In spite of this, however, I think efforts should be made to provide a public supply, sufficient in quantity to distribute throughout the village, especially as many of the houses are now being provided with water closets. Some of the private wells were perilously near the old and bad drains, and I am therefore glad that many of these old drains have this year been destroyed, and the house drains properly piped to the main sewer.

DRAINAGE. For this purpose the village is divided into two parts, an eastern and a western. For the western division a new system of drains and sewage tank were constructed last year, but I am sorry to say that the scheme has not proved satisfactory, the land chosen for irrigation having proved unequal to the work. A determined effort must now be made to remedy the defects, because the accumulation of sewage near the existing tank is dangerous and disgusting.

For the eastern division the present sewers will continue to discharge the sewage into the existing cess-pit, from which the effluent is irrigated over grass land, unless, as I hope, the proposed improvement of the western system can be made to take all the sewage of the village.

NEWTON FERRERS.

Area 3090. Pop. 630. P.R. £3722. Sp. San. P. £2809.
Exp. £100. M. £10.

WATER SUPPLY. A glance at the above figures, with a knowledge of the cost of each of the schemes which have,

during the past few years, been proposed for supplying the village with water, will show how enormously difficult this question is. To satisfy the requirements of the Local Government Board it seems necessary—

1. To find a supply which will yield 15 gallons of water per head of the population per day, and this, not only for the present population, but for a prospective one.
2. To have the pipes laid at such a depth, and all the materials used in the construction of the work so very good, as to render the cost very high.
3. To bring the cost of the scheme within the customary borrowing powers of a parish of similar rateable value.

It must, of course, be remembered that the Local Government Board is the custodian of the rights of the ratepayers of the future as well as the enforcer of the duties of the ratepayers of the present, and I cannot, therefore, say that in the vast majority of cases, the above conditions are either unreasonable or unfair; yet, on the other hand, I cannot forbear saying that to one who has a local knowledge of what Newton Ferrers is and what its water yielding powers are, they appear unnecessarily severe, and they certainly have rendered the schemes hitherto proposed abortive. It must also not be forgotten that the people of Newton Ferrers have to a large extent, been “obstructionists” in this water question, for had it not been for local opposition, I think a satisfactory supply would have been obtained long ago. Unfortunately, the source from which this supply was proposed is not now available. During the year much consideration has been given to a proposal for obtaining a supply from a local source, but after much thought and careful discussion the idea has had to be abandoned. The need for water has been much intensified of late owing to the action of a local landlord in cutting off a source from which the people have hitherto obtained some of their supply. The Council endeavoured to persuade this landlord to restore the

use of the water, but the terms he proposed were so impossible and so onerous that the Council reluctantly had to refuse them. Negotiations are now being made with another landowner for a temporary supply from another source; but even if this be obtained it can only be a small one, and will only be a means of lessening the present distress.

Although the Council have hitherto been unsuccessful in their endeavours to provide a good and plentiful public supply of water, yet I am glad to report that another effort is now being made, and I am very hopeful that the result will be a scheme which will at any rate obtain the sanction of the Local Government Board even if it fails to satisfy the somewhat peculiar ideas of the people of Newton Ferrers.

DRAINAGE. The village is sewered, but the sewers are very insufficiently flushed, especially during the summer, when they want it most. The outfall is into the Newton Creek, a part of the River Yeam.

There is room for much improvement here, but I feel it is premature to suggest anything until the water question is solved.

Torre Village. **WATER SUPPLY.** Quantity and quality good, and distributed through the village by stand-pipes.

DRAINAGE. There is no system of sewers. The closets are on the dry earth and cess-pit system.

REVELSTOKE.

Area	Pop 410.	P.R. £1289.	Sp. San. P.
	Exp. Nil.	M.	.

The **WATER SUPPLY** is good in quality and quantity. It is distributed by iron mains to stand-pipes.

DRAINAGE. The village is sewered, but several closets are on the earth-bucket, and cess-pit systems, and therefore not connected with the drain. Some of the houses are only just above high-water mark, and one of the sewers being also in this position, it is therefore inefficiently flushed. The sewage is discharged into the creek, a part of the river Yealm.

WEMBURY.

Area 3070. Pop. 510. R.R. £2913. Sp. San. P. £2354.
Exp. Nil. M. £10.

Knighton. The WATER SUPPLY is derived from three different sources, and I have no reason to doubt its quality or quantity. It reaches the villagers through public taps, which are placed within reasonable distance of the houses. A few householders have independent supplies.

DRAINAGE. The village is sewered, the sewers discharging into a cess-pit from which the effluent is irrigated over the adjoining land. As many of the houses have large gardens attached to them, they are provided with earth or cess-pit closets.

Downthomas. WATER SUPPLY. There are two public pumps which draw water from two separate wells. Both wells are efficiently protected, and yield water sufficient in quantity and good in quality. The pumps are within easy distance of the houses.

DRAINAGE. There are no public sewers, the closets are all on the dry system, and the slop water is disposed of over the gardens—except from one small block of houses where it has been, without the sanction of the authority, sent into the storm water drains of the highway. Here it has formed a nuisance, which the Council is endeavouring to have abated.

TAMERTON FOLIOTT.

Area 3910. Pop. 1120. P.R. £7447. Sp. San. P. £5058.
Exp. £130. M. £21.

Tamerton. The WATER SUPPLY is good and abundant, being derived from the Plymouth mains. In addition there are two public wells which, although they are situated in somewhat doubtful positions, yet yield water in which I have not been able to detect any impurity. There are also some private wells.

DRAINAGE. The village is sewered, and an important addition has been this year made to the sewers. The main sewer discharges into the Tamerton Creek. *vide* Sanitary Inspector's report.

Franklin Cottages. The WATER SUPPLY is good and abundant from the Plymouth mains.

DRAINAGE. The slop water is collected in a cess-pit, from which the effluent is irrigated over land. The closets are on the earth bucket system, and the houses all have good gardens attached.

WESTON PEVERELL.

Area 399. Pop. 200. P.R. £2096. Sp. San. P.
Exp. Nil.

Weston Mill. The WATER SUPPLY is derived from a public well, which yields a sufficient quantity of good water.

DRAINAGE. There is no complete system of public sewers. The cottages are few in number, and are chiefly provided with earth or cess-pit closets.

HARFORD.

Area 3680. Pop. 145. P.R. £1859. Sp. San. P. Exp. Nil.

There is no public water supply as the houses all have good and independent supplies, either derived from upland surface

moor streams or springs. The parish is also happy in having no drainage scheme, nor is there any necessity for one.

HOLBETON.

Area 4800. Pop. 850. P.R. £4965. Sp. San. P. £3711.
Exp. Nil. M. £15 9s 2d.

WATER SUPPLY. The quality is good but quantity is insufficient. It is derived from springs situated at high level in grass land, and after collecting in a reservoir is distributed throughout the village by stand-pipes.

It is intended to augment the supply, and Mr. F. A. Clark is still engaged in watching the springs to see whether it will be useful to increase the size of the reservoir. I hope soon to see some tangible result, for during a dry summer the present supply is certainly insufficient.

DRAINAGE. The village is well sewered, and the sewage is efficiently and safely disposed of by surface irrigation.

Now that the village is so well sewered, the necessity for improving the water supply is increased.

ST. BUDEAUX.

Area 1560, Pop. 1910, P.R. £7277. Sp. San. P. £5773.
Exp. Nil. M. £23 15s. 1d.

Crown Hill and Honicknowle. The **WATER SUPPLY** is very good. It is derived from the Plymouth mains. For Honicknowle the District Council have guaranteed a certain annual payment to the Plymouth Town Council for that purpose. There are still a few isolated cottages which take water from private wells. These are being watched as some of them are in suspicious situations, and one of them has been closed during the year,

DRAINAGE. This is at present bad ; but ere another year is gone I hope to say it is good, for much progress has been made in constructing the new scheme by which these villages will be efficiently sewered, and the sewage disposed of by being taken into the Devonport mains.

It is pleasant to record the fact that at last the Council have got over the many obstacles which have been placed before them in the matter.

PLYMSTOCK.

Area 2860. Pop. 3360. P.R. £12334. Sp. San. P. £10659.
Exp. £600. M. £46.

WATER SUPPLY. The public supply is very good in quality and quantity. It is derived from the same source as that of Plympton St. Mary, and the mains are distributed throughout the whole of the parish except the village of Staddiscombe.

During the year there have been 44 new house connections made, and on December 30th, the total number of houses connected with the mains was 423, whilst three additional establishments were supplied through meters. The total number of connections is now 484. This is very gratifying, and proves conclusively that the parishioners appreciate the luxury and convenience of a constant water supply.

I fear there are a few householders who manage to obtain water from their neighbour's taps, and so evade the payment of the water rent.

In Staddiscombe there are three public pumps placed in convenient positions and yielding a good supply of water.

Pomphlett. Oreston, Lower Hooe, and Turn-chapel. **DRAINAGE.** These villages are all sewered,

and discharge their sewage into the Cattewater. The majority of the houses possess water closets, many of which are, however, insufficiently flushed.

As the outfalls at Lower Hooe are numerous and too near high water mark, a scheme has been prepared and received the sanction of the Local Government Board for the re-sewering of the village. At last the scheme has received the sanction of the remaining interested authorities, and will, therefore, I hope, soon be carried out.

Plymstock, Elburton, Billacombe, Higher Hooe, and Staddiscombe. In these villages there are no public sewers for reception of anything but slop water except in Plymstock, where, during the year, a public sewer has been constructed, *q.v.*, the Sanitary Inspector's report.

The majority of the houses, except those which possess cess-pits, are supplied with earth closets, which, as a rule, are kept in a wholesome condition. In Billacombe the scavenger removes the contents of the earth closets regularly, in the other villages the householders dispose of it on their gardens.

PLYMPTON ST. MARY.

Area 11200. Pop. 3940. P.R. £28611. Sp. San. P. £17898.
Exp. £750. M. £74 11s. 6d.

The PUBLIC WATER SUPPLY is excellent, and is well distributed throughout **Ridgeway, Colebrook, Underwood and Hemerdon.** It is derived from Bottle Hill, on the borders of Dartmoor, being collected from adits driven far into the hillside. As the demands on this supply are increasing every year, it is proposed to increase it, and during the year a considerable amount of investigation has been made for that purpose.

Lee Mill and Smithhaleigh. Here there is a good public supply taken from springs situated in pasture land. It is well distributed.

Venton. The west end of this village has a satisfactory supply of water from a public well and pump. The east end is from a small spring, whence the water is piped to a tank. The pipes through which the water is conveyed to the tanks are, however, land drain pipes, and therefore the water is subject to pollution during storms.

Sparkwell. The public water supply is a satisfactory one. It is derived from a deep well, from which the water is conveyed to a reservoir and thence distributed to various stand-pipes in the village. It is also taken into a few of the houses. During the year the reservoir has been protected from surface pollution.

DRAINAGE. **Ridgeway, Colebrook, and Underwood** have a system of sewers from which the sewage is disposed of by irrigation over grass land. Considerable improvements and additions have been made in the sewers during the year, for which please refer to the Sanitary Inspector's Report.

Hemerdon. This is sewered, and the sewage disposed of by land irrigation.

Lee Mill. The village is well sewered, the sewers discharging into a public cess-pit, from whence the effluent is irrigated over the land.

The sewer should be extended, and the cess-pit so removed further from the houses.

Venton. This is partly sewered, the remaining part has earth closets.

Sparkwell. This is sewered, the sewers discharge directly on to the land and is disposed of by irrigation.

PLYMPTON ST. MAURICE.

Area 170. Pop. 1120. P.R. £3548. Sp. San. P. £3347
Exp. £200. M. £13.

WATER SUPPLY is excellent in quantity and quality, being from the same source as that of Plympton St. Mary, *q.v.*

DRAINAGE. The sewers are part of the same system as that of Plympton St. Mary.

For account of work done in this parish, see Sanitary Inspector's Report.

SHAUGH PRIOR.

Area 7170. Pop. 810. P.R. £11400. Sp. San. P. ?.
Exp. nil.

Shaugh. The **WATER SUPPLY.** This is good and ample, being derived from springs and wells or small streams direct from the adjoining moor.

DRAINAGE. There is no system of sewers, nor do I think one is desirable. The houses are provided with earth or cess-pit closets, and slop water is disposed of on the gardens.

Lee Moor. THE **WATER SUPPLY** is abundant in quantity and good in quality. It is derived from the adjoining moor, and is distributed to most of the houses from a reservoir and a good service of pipes. Such houses as are not connected with the pipes have independent supplies.

DRAINAGE. There is no public system of sewers, nor is one required. The majority of the houses are provided with earth closets, and have good gardens attached. The schools

and a small block of houses surrounding them are provided with water closets, the sewage from which is irrigated over adjoining land.

YEALMPTON.

Area 3240. Pop. 960. P.R. £4297. Sp. San. P. £3109.
Exp. £200. M. £12 19s. 1d.

The WATER SUPPLY is a public one. The water is derived from springs situated at a high level and in grass land. A large area of the land around the springs is, by agreement, kept free from manure. The water is of good quality, and, as far as present experience goes, is of sufficient quantity. It is distributed through the village from a series of stand-pipes.

DRAINAGE. This is not at all good. Most of the sewers are old and of unknown construction, except a few which have been laid during recent years, which are good. The sewers discharge into cess-pits, from which the effluent is irrigated over the adjoining land. During the year a Committee has been appointed and had an interview with the agent of the chief landowner, and it is hoped that the result will be a proposal for improving the drainage.

Yealmbridge. The WATER SUPPLY is bad. It is derived from wells which are markedly affected by the condition of the adjoining river. I think this hamlet should obtain water from the public supply of Yealmpton, or if this be too costly or impossible, that search should be made for a small independent supply.

DRAINAGE. There is no system of sewers. The houses are supplied with earth or cess-pit closets.

Dunstone. The WATER SUPPLY is very good, both as regards quantity and quality. It is a public one,

and is derived from springs situated at a considerable level above and distance from the village. It is distributed from stand-pipes.

DRAINAGE. There is a system of sewers from which the sewage is irrigated over land.

REPORT OF THE SANITARY INSPECTOR FOR
THE YEAR 1903.

BRIXTON. The old sewers in **Brixton Village** have given considerable trouble. They have frequently become choked and sewage has burst up in the highway. Whenever this has occurred temporary repairs have been done. As these old sewers are so defective and the present outfall unsatisfactory, a new scheme of sewers has been devised, by which the western part of the village will be drained and the sewage taken to a septic tank. The contract for the work has been signed, and the work will, I hope, soon be completed. When this is done several defective slop-water drains and unsatisfactory closets will be put right.

Brixton Coombe. The overflow of the water supply has been improved.

Spriddlestone. The public well has been cleaned out and repaired, whilst the pump and the ground surrounding the well have been raised, by which storm-water from the road will be prevented entering the well. A new waste water drain has been laid and a gully trap put in.

COMPTON GIFFORD. Pending the completion of the drainage scheme the overflow drains from both cess-pits have been extended, and a rough filter-bed has been added to the Widey View outfall.

CORNWOOD. The water reservoir has been cleaned out, and a 4-inch iron pipe has been put in between the in-take and the reservoir, because the stoneware pipe had become choked with roots.

The water supply has been satisfactory.

The public cess-pit has been cleaned out.

Lutton. The water reservoir has been cleaned out, and improvements have been made in front of the stand-pipes. During the year the supply of water has been satisfactory.

The public cess-pit has been cleaned out, and new drains and sanitary conveniences have been put in at the "Mountain Inn," and two water closets and new drains have been provided for Baskerville's, Phillips' and Roberts' Cottages.

ERMINGTON. Here 49 houses have had properly laid and ventilated drains put down and connected to the main sewer, and 15 new water closets have been erected, whilst 22 other closets have been converted into water closets.

The cess-pit at the eastern end of the village has been cleaned out.

Cadleigh Park. The cess-pit has been cleaned.

Westlake. The pump has been repaired.

EGG BUCKLAND. In the village the public cesspit has been cleaned out when necessary and the sewers regularly flushed. At Crabtree drains have been repaired.

Riverford Cottages. I have suggested a scheme for improving the water supply of these and Elizabeth Cottages and am endeavouring to get the work done jointly by the five different owners.

HOLBETON. Some new drains have been put down, old ones repaired, and five closets put into good order.

NEWTON FERRERS.

Higher and Lower Torre. A new and improved water supply has been provided for these hamlets. It is taken from springs situated on Blowden Farm. These springs have been well protected, the water piped to a well constructed reservoir and thence by 400 feet of iron pipe connected to the old service pipe.

These hamlets are now well supplied with water and as an additional spring to those at present in use has been secured, it will be easy to obtain more water should it be required.

Two new houses have had the water laid on.

PLYMSTOCK. A new 9-inch sewer has been laid down from Hillside to the angle of the main road by the Post Office, along the road to Elmleigh House, and thence at a right angle into a field occupied by Mr. Northcott. The house drains from the Post Office and other cottages and Elmleigh have been connected to this sewer, and arrangements have been made for connecting the remaining houses in the road.

Billacombe. A filthy cess-pit has been abolished, and a proper sanitary pail closet provided.

Goosewell Almshouses. Earth closets have been provided.

Staddiscombe. The lower well has been cleaned out and the walls repaired to prevent surface pollution. The higher well has also been cleaned out and the pump repaired. The new pump is now working satisfactorily, and the yield of water has been plentiful. An additional

stand-pipe has been erected near the lower pump. In this village there are now three public pumps and two stand pipes.

Elburton. Notices have been served on the agent of Harleigh House, occupied by Mr. Body, for extensive improvements to the slaughter-house, piggeries, house drainage, &c., and plans are being considered for carrying out the improvements.

Turnchapel. New drains and sanitary conveniences have been provided for the "Boringdon Arms" and Wellfield Villa.

Oreston. A new sewer has been laid in the Pomphlett Road and connected to the main sewer in the road opposite the public pump. By this sewer Mr. Elford's new cottages will be drained.

Some house drains have been repaired and four closets put in good order.

Hooe. The outfalls of the sewers and the foreshore have been cleaned and the sewer near the public closet repaired.

PLYMPTON ST. MAURICE. A new sewer in front of Hanaford Square has been put down by which 10 houses are now properly drained. New drains have been put down for houses in Longbrook Street, Woodbine Villas and Mount Pleasant, whilst several other drains have been put into good order.

The public cess-pits have been cleaned out twice, and the outfalls regularly cleaned. This latter work is rendered necessary by the constant overcharge of the cess-pits and sewers during heavy rains, and I have had to make reports as to the damage done to the sewers and sewage outfalls by storm water from the Highways.

After investigation a Committee recommended that wherever practicable storm water should be prevented entering the sewers and work for this purpose is now being done.

PLYMPTON ST. MARY. In Ridgeway, Colebrook, and Underwood several new house drains have been put down and new conveniences erected or old ones put in good order.

A piece of new 15-inch pipe sewer has been laid at the back of Railway View in the place of a defective wall sewer which passed under a house. The new sewer is laid in a different line so that it does not now go under this house. In several other places the sewers have been repaired.

The sewage tanks in Tan Meadow and Mr. Crossing's Marsh have been cleaned out and the overflow thoroughly cleared. Hitherto this work has been done by the Earl of Morley's men.

Arrangements are being made to extend the outfall sewer from the tanks in Tan Meadow to a point about 100 yards below the Underwood road. This will prevent the discharge of sewage (as at present) into the stream above Mr. Steven's new houses and where a nuisance has sometimes been caused.

There is a large open flushing tank at the rear of Mr. Stephen's wheelwright shop. I recommend that this tank be provided with a cover, as at present it is dangerous to children; and it is also used as a receptacle for all kinds of rubbish, some of which gets into and damages the sewers.

Lee Mill. The public cess-pit has been cleaned when required and the outfalls cleared, whilst the sewers have been regularly flushed.

New sanitary conveniences have been provided for the "Smith Arms" and the "Lee Mill Inn."

Venton. The main sewer has been regularly flushed.

At Flora Cottages and Woodcockseye sanitary conveniences have been put in good order.

Pumps have been repaired here and at Mount Pleasant.

Hemerdon.—The outfalls of the sewers have been kept clean and the sewers flushed.

Sparkwell. The top and sides of the reservoir have been concreted and plastered with cement so as to prevent pollution.

ST. BUDEAUX. The cess-pits at **Crown Hill** and **Honicknowle** have been cleaned out as often as required, and the overflows regularly cleaned and the sewers flushed.

New sanitary conveniences have been provided for the employees at the Brick Works.

Alexandra Cottages have been supplied with water from the Plymouth mains and a badly situated well abandoned.

REVELSTOKE. Bridge End. The water supply requires protection from pollution and a small tank should be provided.

TAMERTON FOLLIOTT. The sewers have been regularly flushed. A great deal of storm water carrying sand and other road detritus gets into these sewers and causes serious mischief. I presented a report on this subject and this was considered by a Committee, who recommended that the storm water be diverted. The work to do this will I hope be completed during the coming spring.

New drains have been put down in Seven Star Lane, at Stephens Cottages, Moor Lodge, Widewell Cottages, Greenbank, and Looseleigh House, and others have been put in good order.

Franklin Cottages. A filter bed has been made under the road for the purpose of purifying the overflow water from the slop water cess-pit. It has proved satisfactory. The public wells have been cleaned out and repaired and two new pumps fixed.

WEMBURY. The cess-pit at **Knighton** has been cleaned out and the sewers flushed. Considerable trouble is caused here by storm water and road detritus getting into the sewers. This I hope to prevent during the coming year.

YEALMPTON. The sewer has been repaired in Church Lane. At **Dunstone** a piece of new sewer has been put down and five houses properly drained.

The water supply has been satisfactory.

DAIRIES, COWSHEDS, AND MILKSHOPS ORDERS.

The progress made in enforcing the regulations under these orders has been a steady one, and especially so when it is remembered that such regulations have, in the majority of cases, meant either extensive and expensive alterations of existing buildings, or the erection of entirely new ones. It is obvious that a long time must elapse before the whole of the buildings will completely comply with the regulations; but I am glad to report that both landlords and farmers are shewing a growing appreciation of the application of the orders; and although it has not been possible to enforce all the structural alterations which are demanded by the orders, yet there are very few cases in which the important rules of whitewashing and cleansing have not been complied with. Up to the present it has not been necessary to resort to any legal measures to get suggested alterations carried out. I have found that the experience of the tenants of such buildings as have been altered in accordance with my suggestions has frequently been the best argument I could appeal to when I have been met with

any objections. At the last meeting of the Committee I reported that I had inspected the whole of the dairies and cowsheds in the district, and that I had served 138 disapproval notices, each notice stating in detail what was wrong. In the majority of cases I have seen the owners or agents and discussed the measures which would best remedy the defects. Of these 138 notices, 28 have been substantially and satisfactorily complied with. 7 new cowsheds have been erected and 21 renovated with brick or concrete floors, improved drainage, better lighting, and ventilation.

The number of certificates now issued is 50.

During the year I had to report specially on two establishments, one in Egg Buckland and the other in Yealmpton. In both these cases there has been marked improvement made.

With regard to every case in which no efforts are being made to comply with the regulations, I have, with the sanction of the Committee, issued a notice to the effect that the business is being carried on illegally, and I purpose, during the coming year, to bring each of these again before the Committee.



*Houses Erected and Water Certificates
granted.*

Egg Buckland	...	...	...	2
Newton Ferrers	...	..	...	1
Plympton St. Mary		..	..	6
Plymstock	...	...	...	19
				28
Cases of overcrowding dealt with	...		...	2
Closets erected or put in good order	...		...	113
Defective drains relaid and piped to sewer				139
General nuisances abated	...	...	...	4
Houses or Rooms fumigated		...	...	40
Drains tested with smoke	...	...	...	35
„ „ „ water	...	...	...	5

Plymouth :

UNDERHILL & Co., PRINTERS, FRANKFORT STREET,
